

CHE

DATE: July 22, 1982
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary

INTER OFFICE MEMO

SUBJECT: Neighbor Complaint

On Thursday, July 22, 1982 at 10:45 am, Barbara Karmiller called to complain about odors coming from the plant. I investigated and found all abaters were operating normally. Tower E was heat cleaning at the time. I discovered that after the new shroud was installed last week the stack on the cupola had not been closed. This is probably the source of the odor, but I will follow up with a visual check.

The temperature was 70°F, the sky was partly cloudy and there was virtually no wind.

EAH/mac
copy: Warren C. Cook
John A. Effenberger
Keith G. Koerber
Charles Tilgner III

COMPLAINT FORM

DATE: 7/22/82

FILLED OUT BY:

EAN

TIME: 10:45

NAME OF COMPLAINTANT:

ADDRESS:

PHONE NUMBER:

TIME OF OCCURRENCE:

NATURE OF COMPLAINT:

STATUS OF EVENT:

24 hours prior

24 hours after

INVESTIGATORS NOTES:

- A. Emissions report @ time of complaint

 1. Visible? (When, where) _____
 2. Smell? (when, where) _____

B. Abator characteristics TOWER E CATALYST CHANGER 7/21/87

C. What was being run at time of complaint on what:

TOWER E HEAT CLEAN

F + H = C7F

- D. Atmospheric conditions: 70°F, PARTLY CLOUDY
NO WIND

- E. Miscellaneous - TOWER E CUPOLA STACK
WAS LEFT OPEN AFTER SHROUD WAS CHANGED
LAST WEEK, WILL BE CLOSED AGAIN TOMS AFTERNOON

DATE: September 20, 1982
FROM: Paul R. Plante PRP
TO: Keith G. Koerber

INTER OFFICE MEMO

SUBJECT: Air Emissions

On Friday, 12 September 1982, I met with an indignant Glenn Frost. I spoke with Mr. Frost approximately 1/2 hour from 5:15 pm on. I also was introduced to one of Mr. Frost's tenants who has adopted some of Mr. Frost's zeal.

I was leaving for the day when I saw Mr. Frost stalking and pacing about outside our plant. I walked over and introduced myself, asked if I could be of assistance. Mr. Frost was looking for Eric A. Henningsen, wondered why two days had elapsed without a reply to his complaint. He said he had been to the plant the night before and spoke to someone to find out what we were doing that night. That apparently was after a phone call complaint on Wednesday.

Mr. Frost has a well developed case of righteous indignation. Two years ago we told Mr. Frost we would clean up our plant emissions and two years later he still has to breathe our odors when he is eating his meals at his table with his windows open on a hot day. Mr. Frost feels that rhetoric does not suffice.

While I stood there talking with Mr. Frost, puffs of odor would waft through and Mr. Frost would punctuate the conversation with "do you see what I mean". Mr. Frost explained that one of his concerns is that he does not know what the odor consists of and feels that he and his children are breathing a harmful substance.

The purpose of this memo is to notify you of the meeting which took place by chance and my perceptions of the meeting.

My replies to Mr. Frost were a reiteration of what steps we had taken over the two years to improve the quality of the air leaving our building and the fact that all of us here are concerned with making any improvements if such are possible.

PRP/mac

DATE: March 2, 1983
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary

INTER OFFICE MEMO

SUBJECT: Neighbor Complaint

On Tuesday, March 1, 1983 at 6:00 pm Barbara Karmiller called to complain about odors coming from the plant. She stated that as well as at this time, she had noticed odors on:

February 2, 1983 at 1:50 pm
February 17, 1983 at 8:30 am and
February 23, 1983 at 8:30 am.
(No calls were received at these times.)

Tower E was up to heat for a temperature profile but was not coating. (It had been down for several days for a shroud change and rerouting of some exhaust lines.) All the narrow towers were running. Tower H was priming C7F and Tower B was running Flasher Red for Andrew. These are the two probable sources since they were filling the plant with smoke. All the abaters were running normally.

A visual check was not possible outside the plant since it was dark. No significant odors were noticeable outside the plant.

The sky was overcast, the temperature about 50°F and the wind direction was westerly.

The odors noticed on the previous dates will be cross-checked with maintenance and manufacturing logs to see if there are any correlations.

EAH/mja
copy: Warren C. Cook
John A. Effenberger
Keith G. Koerber
Charles Tilgner III

DATE: May 25, 1983

FROM: Eric A. Henningsen *EAH*

TO: Charles P. O'Leary

INTER OFFICE MEMO

SUBJECT: Neighbor Complaint

On Tuesday, May 24, 1983, Chuck Tilgner relayed an emission complaint from Mrs. James Palmer. Mrs. Palmer had called Peg Sausville, a Village Trustee. Peg Sausville called Lora Spiller and Lora called Chuck Tilgner.

I spoke with Mrs. Palmer on May 24 at 1:30 pm. Apparently last week her home was engulfed in a blue haze (her home is at the top of Royal Street). Mrs. Palmer characterized the odor and smoke as CHEMFAB's. Mrs. Palmer could not recall a specific date or time of the problem. She was very concerned about possible health hazards. I reassured her that to the best of our knowledge there was no hazard. Mrs. Palmer has agreed to record the date and time of any problems.

Traceability to a specific event in the plant is difficult without a date and time. To the best of my knowledge though, all abaters were maintained by our current established procedure. Catalysts were cleaned when a change in pressure drop across the modules became apparent.

At 1:45 pm on May 24 Mrs. Palmer called back and said the odor was quite strong. I went to her house to investigate and the odor was indeed quite strong. There was no evidence of any visible smoke emissions from the plant. I checked this from two locations. The odor was definitely from a heat cleaning operation. At the time Tower E was heat cleaning 15227. There was no visible smoke in the plant, although there was a heat cleaning odor near the tower. The abater appeared to be functioning normally. The catalyst elements had been changed the day before.

I believe the odor Mrs. Palmer and I noticed was not the result of odor leakage through the ridge vent but rather was stack emissions from the Tower E abater. During last week's incident and this week's, our abatement equipment was maintained by standard procedure. But still the problem persists. It seems that the only way we will ever be able to effectively monitor our abatement system performance

May 25, 1983
Interoffice Memo - Neighbor Complaint
Page 2

(and catalyst rejuvenation) is to have an on-line indication of conversion efficiency. Pressure drop changes across the catalyst do not always coincide with catalyst blinding; and pressure drop changes do not indicate conversion efficiency. I would strongly recommend that we invest the time and effort to investigate a means of measuring on-line conversion efficiency.

EAH/mja

copy: Warren C. Cook
John A. Effenberger
Ronald W. Hakkinen
Keith G. Koerber
L. James Newman
Paul R. Plante
Lora E. Spiller
Charles Tilgner III

DATE: June 24, 1983
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary

INTER OFFICE MEMO

SUBJECT: Neighbor Complaint

On 22 June 1983 at 4:00 pm Mrs. James Palmer called to complain about odors from the plant. Mrs. Palmer has been keeping a log of dates and times of odor problems since her last call. Since then she has noticed odors on June 2 at 2:00 pm; June 4 at 4:50 pm; June 8 at 4:30 pm; June 12 at 7:45 pm and June 22 at 3:45 pm.

I had Pat Hewlett review all the tower logs and he found that on 3 of the 5 occasions we were heat cleaning on the wide towers (twice on Tower E and once on Tower G). The catalyst elements have been cleaned ten times on Tower E in that time period and once on Tower G.

I think that once the month of June is over the situation should improve. In the long term, however, our pollution control efforts have to be increased.

EAH/mja

copy: Warren C. Cook
John A. Effenberger
Ronald W. Hakkinen
Keith G. Koerber
L. James Newman
Lora E. Spiller
Charles Tilgner III

DATE: September 16, 1983
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary

INTER OFFICE MEMO

SUBJECT: Neighbor Complaint

On Friday, September 16, 1983 at 2:15 PM, Barbara Karmiller called to complain about odors from the plant. She noticed the odors in her backyard.

I investigated and found all abaters functioning normally. The Tower E abater had been maintained this morning. Tower E was running CF-1107 passes on RAYDEL® M-26, Tower G was running beads on SHEERFILL® I and Tower D was heat cleaning 116 fabric. The catalysts in the Tower D abater were changed last Saturday. Towers A,B,C,J, and K were running TE-3313 semi-fuse passes on light weight fabrics.

I walked around the outside of the plant and could not notice any odor. The wind was very stong, however, and was blowing in the general direction of Barbara Karmiller's house.

A new procedure was put into effect on 9/13/83 so that the catalyst modules are changed prior to heat cleaning SHEERFILL products and RAYDEL products.

EAH/jgt

Copy: Warren C. Cook
John A. Effenberger
Ronald W. Hakkinen
L. James Newman
Lora E. Spiller
Charles Tilgner III

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DATE: October 14, 1983
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary
Copy: Warren C. Cook Ronald W. Hakkinen Lora E. Spiller
John A. Effenberger L. James Newman Charles Tilgner III

INTER OFFICE MEMO

SUBJECT Neighbor Complaint

On Tuesday, October 11, 1983 at 10:00 AM, 3:00 PM and at 4:30 PM Barbara Karmiller called to complain about odors from the plant. In the morning everything appeared to be running normally. Tower E was running Mobilizer material and Tower G was down for a catalyst change. The catalyst modules on Tower E had been changed the previous day. In the afternoon Barbara called back to complain again about odors. At this point Tower E was heat cleaning 15227. I suspected that this might have been the source, so I went up to Barbara Karmiller's yard to identify the odor. The odor was very sharp and was definitely the "burned starch" odor associated with heat cleaning. Since all of our spare catalysts were being cleaned we could not change the modules in the abater. As an alternative we increased the reactor temperature to 700°F.

It is difficult to isolate whether the odors were coming from our stacks or from problems with capture. During the day the haze in the plant was insignificant. But we do know that a new shroud had been installed on Tower E, and this may have been leaking. Odors are not always accompanied by visible emissions. The next time the tower is down the shroud should be rescaled. Also, I think our cleaning effectiveness needs reevaluation as well as the general condition of the catalyst modules.

Barbara Karmiller called again on October 13, 1983 to complain about odors. I investigated outside the plant and found that there were significant odors. When I spoke with her I assured her that the abaters were functioning normally. And I did tell her that I had noticed the odors and would look into improving our ability to eliminate the odors.

I am trying to organize a pollution control review meeting as soon as everyone is back in town so that we can look at our situation.

EAH/jgt

DATE: April 9, 1984
FROM: Eric A. Henningsen *EAH*
TO: L. James Newman

INTER OFFICE MEMO

SUBJECT: Weekly Summary

The narrow tower backlog is 3.1 days, the intermediate tower backlog is 1.1 days and the fabricating backlog is 6.3 days. We have made use of the extra tower time to run several EOD's.

We continue to run one wide tower, although I anticipate the need to run two wide towers the month of June to keep pace with our requirements. Two small architectural projects have been dropped in.

While Tower G has been down several changes have been made to its configuration. The takeup has been moved in closer to the oven exit, the tenter frame has been completely removed, the headrolls have been dropped about 4 feet and a loadcell weighing system will be installed under the takeup. Also yet to be done is a redesign of the fume capture system and installation of overhead hoists for the payoff and takeup. These changes should greatly improve the operability of the tower while Tower E undergoes its retrofit.

Several neighbor complaints were made this week, one from Barbara Karmiller and one from George Hendee, her next door neighbor. Mr. Hendee has never complained before and was very upset about our inability to control odors over the past three years. I think we may see an escalation of complaints this summer and we should gear up for it. This is one reason I am pursuing the Tower G capture improvement.

Many EOD's were run this week. The roll of 116 from Manchester with the slashed warp yarns was completed as 100-5. The purpose of slashing the warp was to reduce broken filaments during filling. There was no evidence of any broken filaments in the coated product.

April 9, 1984

Eric A. Henningsen - Weekly Summary
Page 2

The MIT radome EOD is well under way and should finish late Monday everything looks good so far. The tension indicator was installed prior to the run which makes it easier to control process tension. A run of 100-10 was made with one of the European Teflons. The other will be run next week. No test data is available yet. A 50% resin style 162 was completed also. A Keene EOD to produce a 3-M like product with different percent resin is underway as well. In addition tower time was made available for numerous R&D EOD's.

I will be going to Manchester Monday to review several issues including Textile Rubber, RAYDEL, slashing and the MIT radome material. I will try to make it up to Manchester at least twice per month per your request. How often do you want me to visit Kilrush? You mentioned going there as well at the Site Managers Meeting.

I have started the job grading review process with my supervisors. We have begun by listing the various jobs we need and will proceed with job descriptions. The supervisors are enthusiastic about the whole process and are pleased that they are included in the discussions.

After the DuPont meeting Steve and I talked about incoming raw material QC. Kate is going to start in on this with trend charts as soon as possible. Pat is lending assistance as needed.

We still need to decide where we will evaluate the Algoflon on architectural fabric. As discussed earlier, stock material is probably the best place.

I spent some time with Ed LaBonte Thursday discussing 8" diameter pipe for wide goods and also material handling in general. He has a wealth of knowledge in this area and I really appreciate him taking the time to come over. I will continue our discussions in Manchester Monday and will adapt some of their material handling techniques.

DATE: April 10, 1984
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary
Copy: Warren C. Cook L. James Newman
John A. Effenberger Lora E. Spiller

INTER OFFICE MEMO

SUBJECT:

Neighbor Complaints

On Thursday, April 5, 1984, Barbara Karmiller called to complain about odors from the plant. the abater on Tower E was "plugged" and was shut down for routine catalyst cleaning shortly after Barbara called. Tower E was heat cleaning 81565 at the time of her call. The wind was blowing Northwest strongly and the temperature was about 50°F. I explained to Barbara that a routine cleaning should help reduce the odor.

On Friday, April 6, 1984, George Hendee called to complain about odors from the plant. Mr. Hendee lives next door to Barbara Karmiller and to date has never called with a complaint. He felt that the odors were particularly bad this week while he was raking his lawn. I told him that we were trying to improve and that many changes had been made over the years to reduce our odor problems. His comment was that we had made many promises the last three years but had never delivered. The source of the odor was probably Tower E where first the passes were being put on SHEERFILL®II. The catalysts in this abater were changed the prior day. Again the wind was blowing Northwest with the temperature about 50°F.

Based on the complaint level and the addition of a new complainer, I think we may be in for a long summer. The modifications to Tower E and G should help but I am still very concerned.

EAH/jgt

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DATE: May 22, 1984
FROM: Eric A. Henningsen *EAH*
TO: Charles P. O'Leary
Copy: Warren C. Cook L. James Newman
John A. Effenberger Lora E. Spiller

INTER OFFICE MEMO

SUBJECT: Neighbor Complaint

On Monday, May 21, 1984 at 4:30 PM, Glenn Frost came to the plant to complain about odors all last week and this week from the plant. Mr. Frost is on vacation for this two week period and has been working in his yard. Tower M was putting a silicone/Teflon pass on q-GUARD which was creating a blue haze in the plant. Tower E was on final bead passes on SHEERFILL II and Tower G was on a fuse dip on 1544. Tower D was running the MIT radome material.

Odors were evident outside the plant. The temperature was 70°. The sky was clear and there was a slight breeze. I informed Mr. Frost about our future plans to improve the situation and he seemed satisfied.

NOTE: To date there have been eight neighbor complaints this calendar year.

EAH/jgt

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DATE: June 6, 1984
FROM: Raymond DeMeis *RD*
TO: All Meeting Attendees

INTER OFFICE MEMO

SUBJECT: Process Air Emissions Meeting Minutes

Attendees: CHEMFAB: Raymond DeMeis, Dr. Manindra Ghosh, Eric A. Henningsen, L. James Newman, Paul R. Plante VERMONT EPA: Alan J. Fillip - Solid Waste Management Chief, Christian B. Jones, Air Pollution Compliance Specialist, Larry D. Miller, Air Pollution Control Engineer

On Tuesday June 5, 1984, a meeting with the Vermont EPA was held at CHEMFAB's North Bennington facility. The purpose of the meeting was to discuss what actions should be taken to analyze and eliminate an odor problem caused by emissions from CHEMFAB's coating process.

Jim Newman provided an overview of the complaint situation and a historical perspective of CHEMFAB's dealings with air emissions and relations with Vermont EPA. Jim Newman also described the various machine drying zones and theoretical percentages of expected air discharges from each one.

Vermont EPA expressed concern that the odor problem, although currently termed "nuisance" could possibly come under new standards related to hazardous material discharges. CHEMFAB agreed to include a determination of this factor within the framework of its analysis. It is felt by CHEMFAB at this time (based on previous discussions with DuPont and CHEMFAB's own chemistry people) that toxicity is not a problem.

After lunch a tour of the production facilities was arranged. One problem still to be resolved is the matter of confidentiality and how it will be handled so as to comply with state practice and CHEMFAB procedures.

June 6, 1984

Raymond DeMeis - Process Air Emissions Meeting
Page 2

During the tour Vermont EPA representatives were shown the various width coaters and the problems of emission collection related to each one. The operation of the building ridge vent was also discussed as it relates to atmospheric discharges of an estimated 10-15% of uncaptured process exhaust.

Two follow-up meetings were held after the tour. One concerned CHEMFAB's present and future permit requirements for point source discharges from each coating tower and its related abater. Vermont EPA provided a flow chart for determining applicable regulations, a copy of the state air pollution control regulations and, an outline of air quality permit application requirements.

The second meeting summarized the day's findings and resulted in the generation of a list of follow-up items which CHEMFAB should address in order to define the next steps required on the part of CHEMFAB and Vermont EPA.

The list is as follows:

1. Provide Vermont EPA with a machine flow diagram showing heat zones and corresponding air flows.
2. Provide Vermont EPA with a raw material list for the coatings in question and if possible a list of potential combustion by-products.
3. Arrange with DuPont to perform a gas chromatograph test on abater inlet and exhaust and possibly emissions from the roof vent area.
4. Update its floor plan and roof vent plan to incorporate the wide width "M" Tower coater and its corresponding abater.
5. Provide Vermont EPA with a copy of the Harvard Health Survey from 1982.
6. Update point source permit applications especially in regards to the near future installation of new coating towers.
7. Provide Vermont EPA with the DuPont emissions report from the former CHEMFAB location.
8. Provide Vermont EPA with copies of the chemical data sheets which cover materials used in the coating process.

June 6, 1984

Raymond DeMeis - Process Air Emissions Meeting
Page 3

9. Contact DuPont with analysis needs to determine whether tests can be arranged for the scheduled June 18th meeting.
10. Contact Vermont EPA with a scope of work from Item 9, before the June 18, so the EPA can determine whether or not one of their representatives is required on site during the testing period.

Through the general discussion, it was concluded that CHEMFAB should attempt to obtain data on the chemical characteristics of the inlet and exhaust streams to and from the abaters in terms of chemical compound, flow rates and parts per million. One wide and one narrow tower should be tested as representative of the operation in general. It was suggested that a gas chromatograph mass spectrometry (GC MS) analysis be performed as it is felt that this will provide the greatest amount of useful information regarding chemical composition of the stack and process emissions. Vermont EPA also suggested CHEMFAB look into the use of a thermocouple imbedded in the abater catalyst to determine when the catalyst requires cleaning.

RD/jgt